

DISCUSSION PAPER SERIES

IZA DP No. 11905

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Market Enough? Refugees' Labor Market  
Integration in Belgium**

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## ABSTRACT

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# Is Quick Formal Access to the Labor Market Enough? Refugees' Labor Market Integration in Belgium

This paper examines the labor market trajectories of refugees who arrived in Belgium between 2003 and 2009. Belgium has offered relatively easy formal labor market access to refugees but they face many other barriers in its strongly regulated and institutionalized labor market. Using the Belgian Labour Force Survey linked to longitudinal administrative data, we estimate event history models to compare refugees' entry into and exit out of the first employment, contrasting their outcomes with family and labor migrants of the same arrival cohort. The analysis shows that refugees take significantly longer to enter their first employment as compared to other migrant groups. They also run a greater risk of exiting out of their first employment into unemployment and (back) into social assistance. The results suggest that quick formal access clearly does not suffice for sustainable integration in the labor market. Additional education and labor market measures appear needed to enhance a more durable integration.

**JEL Classification:** F22, J15, J61, J68

**Keywords:** refugees, family migrants, labor migrants, labor market transitions, event history analysis

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## 1. Introduction

The reception and integration of refugees is one of the most pressing and important issues facing Europe today.<sup>1</sup> The recent influx of asylum seekers also makes it one of the most contentious and hotly debated issues of our time. However, there remains only a limited body of research looking at how refugees are faring in European labor markets (Aiyar et al., 2016; Bakker et al., 2016; Bevelander & Pendakur, 2014; Bratsberg et al. 2017; Fasani et al., 2017; Luik et al., 2016; Ruiz & Vargas-Silva, 2017; Sarvimäki, 2017; Schultz-Nielsen, 2017). These studies highlight the many obstacles facing refugees, not just in terms of getting into employment but also in terms of getting decent and well-paid jobs.

In this study we examine two research questions, with a focus on Belgium. The first is descriptive: what do refugees' socio-economic careers look like in the first years after arrival? The second is explanatory: how can refugees' labor market integration be explained in a longitudinal framework, by looking at their entry into and exit out of the first employment? Given the past and expected forthcoming inflow of asylum seekers to Europe, it is crucial to gain insight in the labor market trajectories of people that obtain a status of international protection. Their migration motive and the context of reception in the host country distinguishes refugees from other migrants, thus increasing the need for more knowledge on the integration of this specific migrant group.

Our paper contributes to the current state-of-the-art in two ways. First, we study refugees' labor market participation within a longitudinal framework. We make use of a database that links the Belgian Labour Force Survey with longitudinal administrative

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<sup>1</sup> The authors gratefully acknowledge financial support from the Belgian Science Policy Office (BELSPO) under contract BR/165/A4/IMMIGBEL.

data. The longitudinal nature of our data enables us to reconstruct refugees' labor market participation over time and to study if – and after how many years – they converge to the levels of comparable migrants.

Our second contribution is that we offer evidence on Belgium, a country that presents itself as a particularly relevant and interesting case. Belgium has had a relatively strong influx of asylum seekers during the last decades, alongside very significant family reunification and less sizeable labor migration inflows. Immigration levels have reached unprecedented levels over the past decade and have accounted for the bulk of population growth in Belgium since the 1990s. Belgium offers migrants, including refugees, relatively easy and quick formal access to the labor market and its extensive social security system, as we will set out below. On the other hand, Belgium has among the most tightly regulated and most strongly institutionalized labor markets in Europe (OECD, 2013 2016). In addition to comparatively tight legal restrictions on hiring and firing practices, the use of temporary contracts and other forms of non-standard employment (including night and weekend work) remains subject to comparatively tight restrictions. Collective wage bargaining remains extensive (in part because of legal extension of collective agreements to the total work force), resulting in Belgium having among the most compressed wage distributions in the OECD area. According to OECD statistics, fewer people work in relatively low-paid jobs than just about anywhere else. In other words, the Belgian labor market has all the hallmarks of strong insider-outsider divide. Certain segments of the labor market that are present or growing in many rich countries remain very small or virtually non-existent in Belgium – particularly relatively low-paid service sector jobs that require little formal training and that come with few additional benefits or job certainty. As an institutional ‘choice’, such jobs hardly exist in Belgium. This is creating a fundamental tension since the

employment gap between foreign-born and Belgian-born people is one of the highest of the European Union (Corluy & Verbist, 2014; Jean et al., 2010; Pina et al., 2015). In particular non-EU migrants have a very low labor market participation rate (Corluy & Verbist, 2014; Mussche et al., 2013). The question of how existing social rights and protections can be balanced with the goal of integrating refugees into the labor market thus presents itself with particular saliency in Belgium.

The paper unfolds as follows. We start with a short review of the main theoretical arguments, and the available empirical evidence on refugee labor market integration. We then describe the Belgian setting, by contextualizing asylum migration in Belgium's other migration flows. We also explain labor market access and social security entitlements of asylum seekers and refugees. We continue by describing in more detail our data and methods and then report our main empirical findings. The final section summarizes and discusses the central findings of the study.

## **2. Refugees' labor market integration: what is known**

Upon arrival in a new country, migrants face certain disadvantages, as they lack country-specific human (work experience, language proficiency and recognition of their home country credentials) and social capital. This tends to result in higher risks of unemployment, and lower occupational status and earnings as compared to the native-born (Liebig, 2015). Over time, however, migrants are expected to catch up with the native-born, as they acquire social networks, language skills and other host country human capital that will help them overcome initial shortfalls (Akresh, 2008; Borjas, 1994; Chiswick, 1978; Friedberg, 2000; Kalter & Granato, 2007; Reitz, 2007). This process of gradual socio-economic convergence is not uniform and varies considerably (Kogan & Weißmann 2013; Stier & Levanon, 2003). Some migrants arrive in a new

country and quickly make a transition into steady employment, while others face stubbornly persistent labor market barriers (Barbiano di Belgiojoso, 2017; Fuller & Martin, 2012; Simón et al., 2014).

While considerable research has focused on migrant employment and wage gaps with natives, little is known about the so-called ‘refugee gap’, which is the employment and wage gap between refugees and other migrant groups (Connor, 2010). An important reason for the limited evidence is data limitations, since detailed statistical information on migration motive is not always easily accessible (Bevelander, 2016). A number of studies in traditional settler countries such as Australia, the US and Canada show that shortly after arriving in the host country, refugees do not fare well in the labor market. Compared to family and labor migrants, refugees are characterized by lower levels of employment (Aydemir, 2011; Cobb-Clark, 2000; Phythian et al., 2009) and earnings (Cortes, 2004; DeSilva, 1997), and higher levels of social security dependence (Devoretz et al., 2004).

This ‘refugee gap’ has been attributed to different types of factors. First, it is argued that seeking refuge is often less planned and prepared than other forms of migration and, therefore, refugees arrive in the host country with relatively poorer language skills and weaker attachments or links to the host country (Chiswick, 1999; Richmond, 1988). Consequently, securing both a higher language proficiency and accreditation of skills are relatively slow processes that can delay labor market access (Rooth, 1999). Second, due to the forced nature of their migration and the traumatic experiences frequently associated with it, many refugees suffer from psychological distress. Health conditions like post-migration stress or trauma are shown to have strong links with labor market outcomes of refugees (Hartog & Zorlu, 2009). Finally, asylum seeker-specific obstacles are legal restrictions to access the labor market, sometimes

protracted asylum procedures and the fact that they may only obtain a temporary, insecure residence status. These barriers prevent refugees from quickly and fully participating in the labor market (Bakker et al., 2014; Bloch, 2008; De Vroome & Van Tubergen, 2010; Hainmueller et al., 2016).

With increased time in the host country, refugees are expected to catch up and show similar or even higher employment and wage levels compared to other migrants. The most important reason cited for this recovery process is that the likelihood of returning home is smaller for refugees, as they face a higher risk of harm or persecution and often keep fewer social ties with their country of origin (Phillimore, 2011). In view of their prospects for settling permanently, refugees thus have a stronger incentive to invest in the host country's own human capital (by learning one of the national languages, for instance), which ultimately facilitates their integration (Cortes, 2004). As such, higher rates of human capital accumulation can lead to refugees catching up with and perhaps even outperforming other migrants over time.

Spurred by the recent influx of asylum seekers in Europe, a line of research is now emerging on labor market integration of refugees in selected European countries (Bakker et al., 2016 for the Netherlands; Bratsberg et al., 2017 for Norway; Sarvimäki, 2017 for Finland; Schultz-Nielsen, 2017 for Denmark). These studies measure the labor market outcomes of refugees in a longitudinal perspective, contrasting their outcomes with different comparison groups (EU migrants, non-EU family and labor migrants and native-born). Their results seem robust with findings for traditional settler countries (the US, Canada and Australia), as they too uncover a significant refugee employment gap right after arrival and, subsequently, a recovery process with refugees catching up to the employment level of other migrants and natives. However these studies additionally show that, after some years of residence, the labor market participation of refugees

stabilizes (or even decreases) while the rates of social transfer dependency increase. In these countries, a substantial ‘refugee gap’ thus prevails and may in fact increase after an initial period of improved relative positions.

In this paper, we add to the limited longitudinal evidence on refugee integration in Europe by presenting the Belgian case. Therefore, we start by describing the Belgian setting.

### **3. The Belgian setting**

#### ***3.1. Migration & asylum history***

Belgium’s history of immigration does not date much further than a hundred years back, which makes it often overlooked as a country of immigration (Lesthaeghe, 2000). Yet, over the last decades it has become a permanent country of settlement for diverse migrant groups. Today immigrants, defined as those born abroad whatever their nationality, account for a high and rising share of the Belgian population (16% in 2016).<sup>2</sup>

In the 1950s and 1960s, Belgium set out to attract primarily unskilled workers from Southern European countries and later from Northern African countries and Turkey to work in mining and heavy industry. Backed by the lenient rules for family reunification at the time, these guest workers stayed, brought their families and settled permanently into Belgian society. Despite the introduction of a formal cap to limit economic migration in 1974, the immigration landscape kept on widening and diversifying in the next decades (Corluy, 2014). Labor migration continued, especially of more highly skilled migrant workers. Family migration increased and took over from

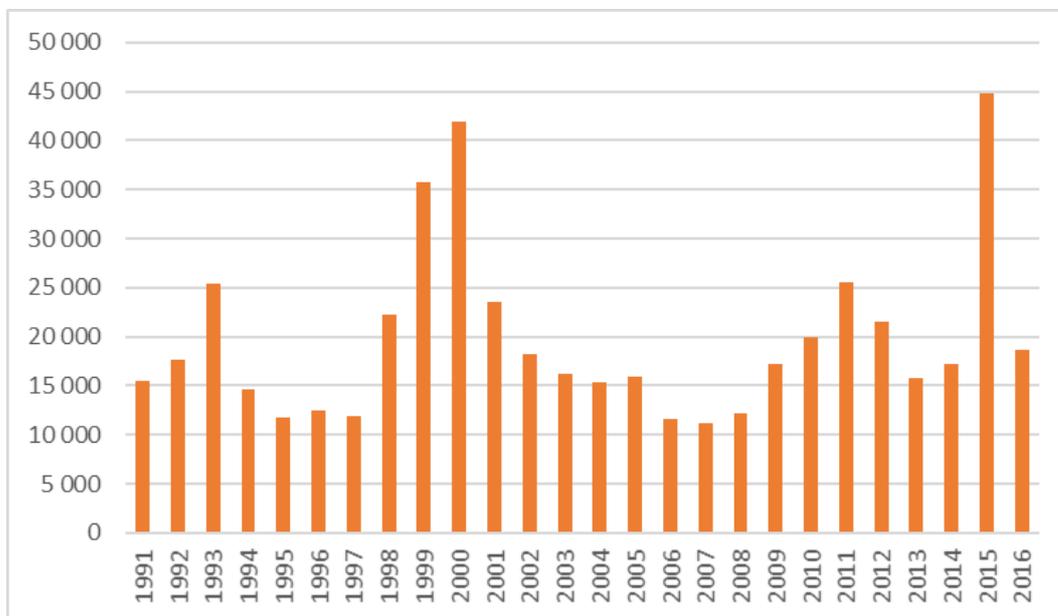
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<sup>2</sup> [http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=urb\\_cpopcb&lang=en](http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=urb_cpopcb&lang=en) (24/07/18)

labor migration as the most important entry channel to Belgium. It was not until 1990 that asylum seekers became an important phenomenon. Asylum applications peaked particularly in 1993, when 25,000 applications or the equivalent of 42% of all entries into Belgium were registered; in 2000 when 42,000 applications, or 62% of total entries were recorded; and in 2011, when 25,000 asylum seekers, corresponding to 19% of total immigration flows, came to Belgium (Burggraeve & Piton, 2016).

In 2015, Belgium received 44,800 asylum requests, which makes the inflow much bigger than those seen in 1993 and 2011, but it is similar to that of the year 2000 (see Figure 1). The share of asylum seekers who were granted a residence status is nevertheless higher than in the past. The 61% positive decision rate in 2015 was up from 47% in 2014 and 29% in 2013 (CGRS, 2017).

**Figure 1. Overview of the number of asylum applicants in Belgium.**



*Source: CGRS (office of the commissioner general for refugees and stateless persons)*

Applications for asylum in Belgium accounted for 3.1% of the total number in the EU in 2015. With 35 applicants per 10,000 inhabitants, Belgium was eighth on the list of EU host countries taking in the most asylum seekers.<sup>3</sup> In absolute figures, the leading countries are Germany and Hungary (respectively 35% and 14% of all applicants), while Hungary, Sweden and Austria lead in terms of applicants per capita (respectively 177, 161 and 100 applicants per 10,000 inhabitants).<sup>4</sup>

### ***3.2. Institutional framework***

Belgium is a federal state. Legislation on employment conditions falls under the competency of the federal government. The implementation of this law is to a large extent part of the competency of the regional authorities, which includes among others the granting of work permits to third-country nationals. As a general rule, EU/EEA and Swiss citizens – and their family members – do not require a work permit in order to be employed in Belgium. However, third-country nationals (non-EU/EEA/Swiss citizens) and their family members who still do not have a permanent right of residence typically require a Belgian work permit.<sup>5</sup>

Regarding the more specific issue of asylum seekers, the process of acquiring a work permit has undergone numerous changes since the 1970s, at times involving long waiting periods and preventions from working (Rea et al., 2014). Asylum seekers declared admissible could work with a work permit C between April 2003 to May 2007.

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<sup>3</sup> <http://www.myria.be/files/Myriadocs-1-NL-Europaincrisis.pdf> (24/07/18)

<sup>4</sup> It should nevertheless be noted that Hungary is regarded as a transit country, unlike the other three countries, which constitute the final destination for potential refugees.

<sup>5</sup> [https://www.belgium.be/en/work/coming\\_to\\_work\\_in\\_belgium/work\\_permit](https://www.belgium.be/en/work/coming_to_work_in_belgium/work_permit) (24/07/18)

Such a work permit is valid for one year and renewable. Between 2007 and 2010, asylum seekers could no longer work as a result of the 2007 legislative changes, which removed the admissibility phase in the asylum procedure. Therefore, asylum seekers were no longer eligible for a work permit. Since 2010, asylum seekers who fulfil certain criteria are allowed to work with a work permit C. It concerns asylum seekers who have not yet received a first instance decision on their asylum case within six months following the registration of their asylum application. After February 2011 up to December 2014 the same work regime was valid, but during this period asylum seekers needed to contribute to the costs of their accommodation and other material support if employed. This applied to those asylum seekers who resided in a reception centre while working: they continued to be eligible both for material support and housing, but were obliged to contribute.

Since September 2015, asylum seekers have been able to get into the labor market four months after they have registered with the Belgian Immigration Office (Burggraeve & Piton, 2016; Fric & Aumayr-Pintar, 2016). Following this reform, Belgium is now among the European countries with the shortest period for obtaining a work permit. Only Greece and Sweden have shorter waiting periods, as they allow immediate entry, as well as Austria, Romania and Germany, where workers have to wait three months (Fric & Aumayr-Pintar, 2016). In Belgium, work permits for asylum seekers are not conditional on a test to make sure that no national or European resident is interested in the vacancy (unlike in Austria and Greece). There are also no limits on the sectors of activity where asylum seekers are allowed to work (unlike in Austria, the UK and Sweden), and asylum seekers are eligible for self-employment (unlike in Germany and the UK), under the condition that they apply for a professional card (Fric

& Aumayr-Pintar, 2016).<sup>6</sup> If asylum seekers obtained the refugee status, they can work without a work permit.

Asylum seekers are entitled to unemployment benefits under the same terms as Belgian nationals. In practice, however, asylum seekers are unable to avail themselves of these benefits since a work history (or at least a minimum qualifying period) is required, which, of course, they cannot meet (Mussche et al., 2013). In contrast to unemployment benefits, social assistance – non-contributory guaranteed minimum resources – does not have any requirements such as waiting periods and compulsory payment of contributions. People can apply for the subsidiary minimum income if they cannot claim other social insurance benefits. Eligibility is regulated by a means-test for the household, according to the de facto living arrangement. The amount of the benefit, which is equal under both acts, varies according to the household type. The social assistance benefit amounts are rather low by international standards, especially for single persons and couples with children. As a result, social assistance beneficiaries in all household types live with an income that is lower than the relative poverty line (Van Mechelen & Marchal, 2013). Furthermore, non-take up rates are substantial (Bouckaert & Schokkaert, 2011).

Compared to other European countries, Belgium does show higher ‘nominal’ flexibility when it comes to labor market access for refugees and asylum seekers. However, accessing the labor market is still quite far from actually getting a job. Moreover, while Belgian social security is in principle an inclusive one, the fact that it

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<sup>6</sup> Given the uncertain residence for the asylum applicant, it is not allowed that the self-employed activity requires large investments.

is a strongly work-based system means that a steady link to the labor market is required in order to build up social security entitlements.

## **4. Data & Methods**

### ***4.1.Data***

In order to understand how refugees progress (or regress) in the host society, this paper builds on a longitudinal data set linking the Belgian Labour Force Survey (LFS) with the Data Warehouse Labour Market and Social Protection.<sup>7</sup>

For Belgium, the LFS is a representative sample from the National Register and provides, in addition to demographic characteristics, both general and more detailed data on the employment situation, such as the quality of employment and characteristics of the workplace. An added value of this sample versus administrative data, and absolutely indispensable for sociological (and economics) labor market research, is that the highest educational level is available. The sample is also large enough to distinguish between broad categories of migrants (Corluy & Verbist, 2014). However, in Belgium the LFS is a cross-sectional database, without a longitudinal (panel) dimension. Ideally, longitudinal data are needed to evaluate a potential labor market integration process. Next to its limitations in terms of longitudinal analysis, the Belgian LFS in principal does not allow for an identification of refugees.<sup>8</sup>

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<sup>7</sup> The data matching between the LFS and the Data Warehouse was an exact one, in the sense that the national register numbers have been used to link the individuals' information in both datasets.

<sup>8</sup> Exceptions are the special ad hoc modules of LFS 2008 and 2014, containing information on migrants' self-declared reason for coming to Belgium (see e.g. de Matos & Liebig, 2014 for

We try to compensate for both limitations by using the linkage with the Data Warehouse Labour Market and Social Protection which gathers longitudinal data from various administrative databases and the National Register for scientific use.<sup>9</sup> First, on the basis of the data from the participating social security institutes, detailed quarterly information on the socio-economic position of the population is available. Depending on a position in or out of the labor market, the population is divided into employed, unemployed, in social assistance, inactive or other unspecified.<sup>10</sup> The situation taken into account is invariably the situation on the last day of the quarter.

Employment covers self-employment, work in the regular job market and subsidized work and all possible combinations of these. Unemployment covers job seekers with a waiting allowance, an unemployment benefit or a guidance allowance. Social assistance beneficiaries are all those receiving a living allowance or other forms of financial support. Inactivity encompasses full-time career break, incapacitation from employment, and entitlement to allocation for disabled persons. Other unspecified

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an analysis of the ad hoc module 2008; and Dumont et al., 2016 for an analysis of the ad hoc module 2014). However, the self-declared migration motive might differ from the actual legal category under which the person entered.

<sup>9</sup> For more information on the Data Warehouse Labour Market and Social Protection see <https://www.ksz-bcss.fgov.be/nl/dwh/homepage/index.html> (24/07/18).

<sup>10</sup> The socio-economic position is assigned hierarchically, giving priority to work over benefits. Consequently, a person in employment could still have a social assistance benefit top-up payment.

encompasses all persons who did not fit in any of the previous categories and thus are unknown to the participating social security institutions.<sup>11</sup>

Second, the Data Warehouse includes information on the first issued residence permit of migrants, thus making it possible to categorize migrants by their legal means of access for stay or residence in Belgium. Here, we define as ‘refugees’ migrants who obtained their first residence permit for reasons of asylum and international protection. In contrast to previous studies that use the date on which the first residence permit was obtained as a starting point, we trace the socio-economic positions of refugees based on their self-reported year of arrival in Belgium (calculated from the years since migration variable in the LFS), which means that we include information on the period before the residency status was granted. This is important because we know from recent studies that the first period after migration is important to refugee integration (Bakker et al., 2014; De Vroome & Van Tubergen, 2010; Hainmueller et al., 2016).

Furthermore, since the LFS sample is drawn from the National Register<sup>12</sup>, we are confident that at the time of the LFS, migrants have obtained either a temporary or

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<sup>11</sup> The following heterogeneous and non-exhaustive list of situations serves as an example:

cross-border workers, persons in full-time family care, persons working for supra-national institutions, and persons who are known to the participating social security institutions in the course of the quarter, but not on the last day of the quarter.

<sup>12</sup> The National Register includes individuals from the population register (Belgians living in a Belgian municipality and foreigners with a permanent residence permit), from the aliens’ register (foreigners with a temporary residence permit, recognized refugees and regularized asylum seekers), and from the register of officials of the European Union. Belgians abroad, asylum seekers (waiting register) and persons without legal residency are not included in the sample (FPS Economy, Directorate General Statistics and Economic Information).

permanent residence permit. As a result, our findings extrapolate only to the migrants who eventually do get a temporary or permanent residence permit (or in the case of asylum seekers, got recognized as a refugee), and not to the ones who do not.

With these linked longitudinal survey & administrative data we have a to international standards uniquely rich data base to study the labor market trajectories of refugees, with different comparison groups: family migrants and labor migrants. Nevertheless, our data also have some important limitations. First, we do not pick up employment in the informal market, which is known as an important source of employment for migrants in Belgium (Geets et al., 2007; Rezaei et al., 2013). Additionally, the socio-economic position in the Data Warehouse does not capture participation in training and education, which is an important drawback since the migrants in our sample are still fairly young and Belgium offers good opportunities here. Second, we do not possess information on when migrants received their residence permit or foreigners card (or in the case of asylum seekers, got recognized as a refugee). Our sample includes both migrants who have not yet completed the recognition process and migrants who obtained their residence permit, and we cannot observe when the transition between the two states takes place. Finally, we recognize the limitation that the first issued residence permit might not completely reflect the true motivations and aspirations of the individuals when they first migrate, as sometimes those motives are hard to fit into rigid administrative categories. Nonetheless, we believe that the first issued residence permit still provides a relevant aspect when looking at outcomes later on.

In order to have a large enough sample size, we pooled together three yearly LFS samples (2010, 2011 and 2012) with linked quarterly information on the socio-economic position from the Data Warehouse until 2012. We selected refugees (N=247),

family migrants (N=2697) and labor migrants (N=1922) who arrived in Belgium between 2003 and 2009 and were between the ages of 18 and 55 upon arrival. Originally, we had 2345 labor migrants in our dataset. However, a large share of the labor migrants was unknown to Belgian social security (presumably because they worked for supra-national institutions). Including these labor migrants in the analysis would lead to an underestimation of their ‘genuine’ employment levels. In our dataset we were able to single out these labor migrants (N=432).<sup>13</sup> We decided to exclude them from the analysis.

We study migrants who arrived from 2003 on, as the data on social assistance uptake are only from this moment integrated in the Data Warehouse. Furthermore, as we look at the first years after arrival and we dispose of data until 2012, we did not study the people arriving after 2009 because the observation window would then become too short. Finally, we only examine individuals who were aged between 18 and 55 upon arrival, in order to diminish the potentially negative bias on employment entry due to mobility in school participation and retirement.

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<sup>13</sup> In order to identify the labour migrants who were employed in supra-national institutions, we first selected the labour migrants who – according to the information of the Data Warehouse – were in the ‘other unspecified’ state at the time of the LFS. Subsequently, we looked at their employment status in the LFS based to the ILO definition (i.e. completed at least one hour of work in the period being measured, or are temporarily away from his or her job). We found that of the 623 labour migrants in the ‘other’ state at the time of the survey, 432 (69%) were employed according to the ILO definition.

#### ***4.2. Methods***

To answer the first research question of the paper, we present the quarterly distribution of socio-economic positions by time since arrival for refugees, family migrants and labor migrants separately. We choose to display the distributions by years since arrival and not by calendar year because we have different arrival cohorts; in the year 2007, the socio-economic position of those who arrived in 2003 and had therefore been in Belgium for four years does not mean the same as for those who arrived in 2006 and had therefore only been in Belgium for one year. Showing the results by time since arrival, therefore, is a more accurate way of presenting the results since it is independent of arrival cohort.

Subsequently, with the second research question we aim to gain more insight in the labor market transitions that are behind the socio-economic careers of refugees and other migrants. As the main focus is on transitions, the multivariate analysis is based on discrete-time event history techniques (Blossfeld & Rohwer, 1995). The hazard rates of entering the first employment and of exiting the first employment are the two main dependent variables.<sup>14</sup> The key advantage of modelling duration using hazard rates is that right-censored cases, individuals who do not experience the event at the end of the observation window, are easily incorporated. It is also fairly straightforward to evaluate qualitatively different transitions, and their determinants, by applying a competing risk framework. This is important because, in a model of first employment duration, we may wish to know about not only time until exit from employment by whatever route, but also about time to exit from employment to unemployment, and compare this with time

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<sup>14</sup> Although both transitions are continuous processes, we estimate discrete-time models because analysis time is measured in quarters (Jenkins, 2007).

to exit from employment to social assistance or inactivity. Competing risk models provide a method of addressing such issues.

For the entry into first employment, duration in quarters elapsed since arrival is used as the exposure dimension in the analysis. For the analysis of first employment exit hazards the duration in quarters since employment entry is used. A logarithmic baseline hazard function is included for all models, meaning that hazards increase at earlier durations and decrease at higher exposures. All models use a logit link function, allowing for an interpretation of the exponentiated parameter estimates,  $e(b)$ , in terms of odds ratios.

In the models presented, we compare refugees with both family and labor migrants. Also included in our multivariate hazard models are a set of control variables. Gender is one obvious candidate. Additionally, we expect that (lack of) human capital is a very important determinant of labor market integration. Hence, we consider age at migration as a linear term, and we also include a quadratic term to account for possible nonlinearities in the effect. The highest level of education is also included, divided here into three categories: low (ISCED 0 through 2), medium (ISCED 3 & 4) and high (ISCED 5 & 6). Since the Belgian regions differ considerably in terms of economic situation and thus in employment prospects for individuals, geographical spread of migrants may provide an additional explanation for differences in labor market participation. Hence, region of residence (Flanders, Brussels, Wallonia) is added. In order to assess the influence of region of origin, migrants are sorted into six categories based on country of birth: EU Member States, Europe non-EU, Turkey & North-Africa, Sub-Saharan Africa, Asia and America. Lastly, we control for the year of arrival (six dummies) and the year in which migrants were interviewed by the LFS (two dummies).

All covariates are measured in a time-invariant way. An important consideration is that both the highest level of education and the region of residence are measured at the time of the LFS and not at the time of arrival. Unfortunately, the design of the LFS questionnaire does not allow a complete reconstruction of education histories. Combining the questions ‘What is the highest level of education you have successfully completed?’ and ‘In what year did you reach that level?’ does not provide sufficient information to evaluate whether an individual was continuously enrolled in education up to the date of the highest educational attainment. We did however perform a sensitivity analysis, where we selected only those immigrants who obtained their highest level of education in the home country.<sup>15</sup> Results remained robust and are available from the authors on request.

## **5. Results**

### ***5.1. Characteristics of refugees and other migrants***

Descriptive statistics, reported in Table 1, indicate that refugees and labor migrants are predominantly male, while family migrants are predominantly female. Of the three migrant groups, refugees arrive at the youngest age with a mean age at migration of 29. For family migrants this is age 30 and for labor migrants age 32. There exists considerable variation in terms of education: nearly 56% of refugees is low educated compared to 44% of family migrants, and 29% of labor migrants. Refugees are also less frequently higher educated (only 17% is high educated). With regard to geographical spread, we observe that, in comparison to other migrant groups, refugees more often

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<sup>15</sup> 16 refugees, 118 family migrants and 102 labour migrants obtained their highest degree in Belgium.

reside in Flanders and less often reside in Brussels.

There are also clear differences in terms of the dominant region of origin. Almost every refugee in our sample originates from a country outside the EU. The most common regions of origin are sub-Saharan Africa (35%), Asia (34%) and Central and Eastern Europe (19%). In clear contrast, the large majority of labor migrants come from EU Member States (78%). An important share of family migrants come from Turkey and North-Africa (39%). The other dominant regions of origin are EU Member States (23%), Asia (12%) and sub-Saharan Africa (11%). The arrival years 2003 to 2005 represent each of them about 10% of our sample. The arrival years 2006 and 2007 cover about 15% and the arrival year 2008 about 20% of the sample. Lastly, family and labor migrants are equally represented in the different survey years, while refugees are less likely to be in the 2010 survey.

**Table 1. Distribution of the sample by background characteristics**

	<b>Refugees</b>	<b>Family migrants</b>	<b>Labor migrants</b>
<b>Sex</b>			
Female	40.0	66.4	38.1
Male	60.0	33.6	61.9
<b>Age at arrival (mean)</b>			
	29.4	30.2	32.1
<b>Highest level of education</b>			
Low	55.7	44.1	29.4
Medium	27.5	29.7	34.6
High	16.8	26.1	36.0
<b>Region of residence</b>			
Brussels	25.5	34.9	42.6
Flanders	53.3	42.1	41.8
Wallonia	21.2	23.1	15.6
<b>Region of origin</b>			
EU	0.7	23.4	77.5
Europe non-EU	18.8	8.0	3.3
Turkey & North-Africa	10.3	39.3	9.1
Sub-Saharan Africa	35.4	11.0	4.5
Asia	34.3	12.0	3.1

America	0.4	6.3	2.4
<b>Year of arrival</b>			
2003	11.0	7.3	9.2
2004	9.8	9.1	8.8
2005	12.3	11.8	10.2
2006	18.0	15.6	14.0
2007	14.8	17.5	17.9
2008	22.8	20.3	20.4
2009	11.4	18.5	19.4
<b>Year of LFS survey</b>			
2010	26.4	31.7	31.4
2011	34.9	34.0	34.5
2012	38.6	34.3	34.1
<b>N</b>	<b>247</b>	<b>2697</b>	<b>1922</b>

*Source: Labour Force Survey and Data Warehouse Labour Market and Social*

### *Protection*

*Note: Results are weighted using the available weighting variable in the LFS, which adds weights gender, age and region of residence.*

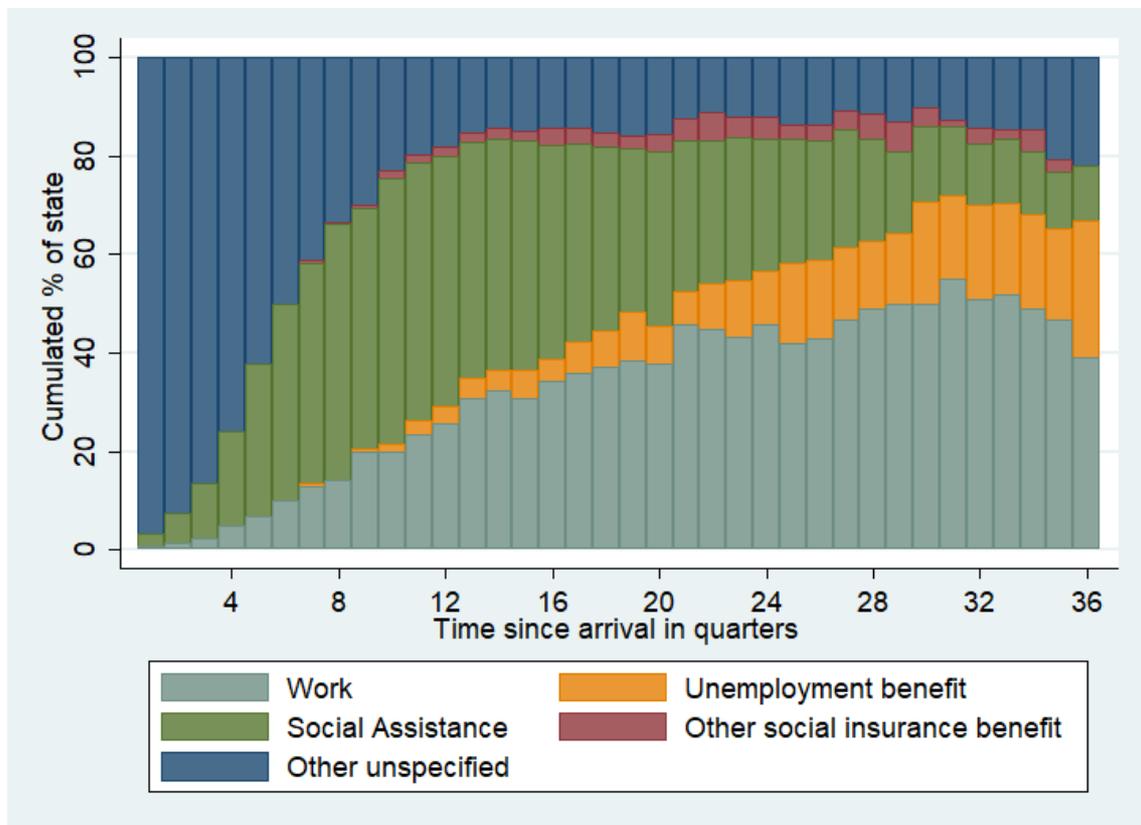
### **5.2. Socio-economic careers of refugees**

Before we turn to our event history analysis, we take a simpler perspective to get a first impression of the socio-economic careers of refugees. This can be gained by showing quarterly distribution plots, where the proportion in certain socio-economic positions is displayed by time since arrival in Belgium.

Figure 2 shows the quarterly distribution plots for refugees. Refugees tend to follow a particular trajectory, which is roughly as follows. In the first years after arrival, the large majority of refugees has no connection with Belgian social security whatsoever. After entry, and hardly surprising, very few refugees are to be found in the formal labor market. Similarly, very few are dependent on social transfers. But after this initial phase follows a very quick and strong rise in dependency on social assistance, the only social protection programme to which refugees can have relatively rapid access in

the largely contributions-based Belgian social protection system. In the third year since arrival, the share of social assistance beneficiaries reaches a peak, just above 50%. Entry into employment remains very low during the first years after entry. After what we could label a transition phase, which takes about 4 years, dependency on social assistance starts to drop and employment participation surges. After eight years, 52% works legally (employed or self-employed). But sometime into this second phase we also see an important fraction transitioning into unemployment benefits (18% at the end of the ninth year). Yet at the same time, an important fraction remains dependent on social assistance (12%) or stays unknown to Belgian social security institutions (21%).

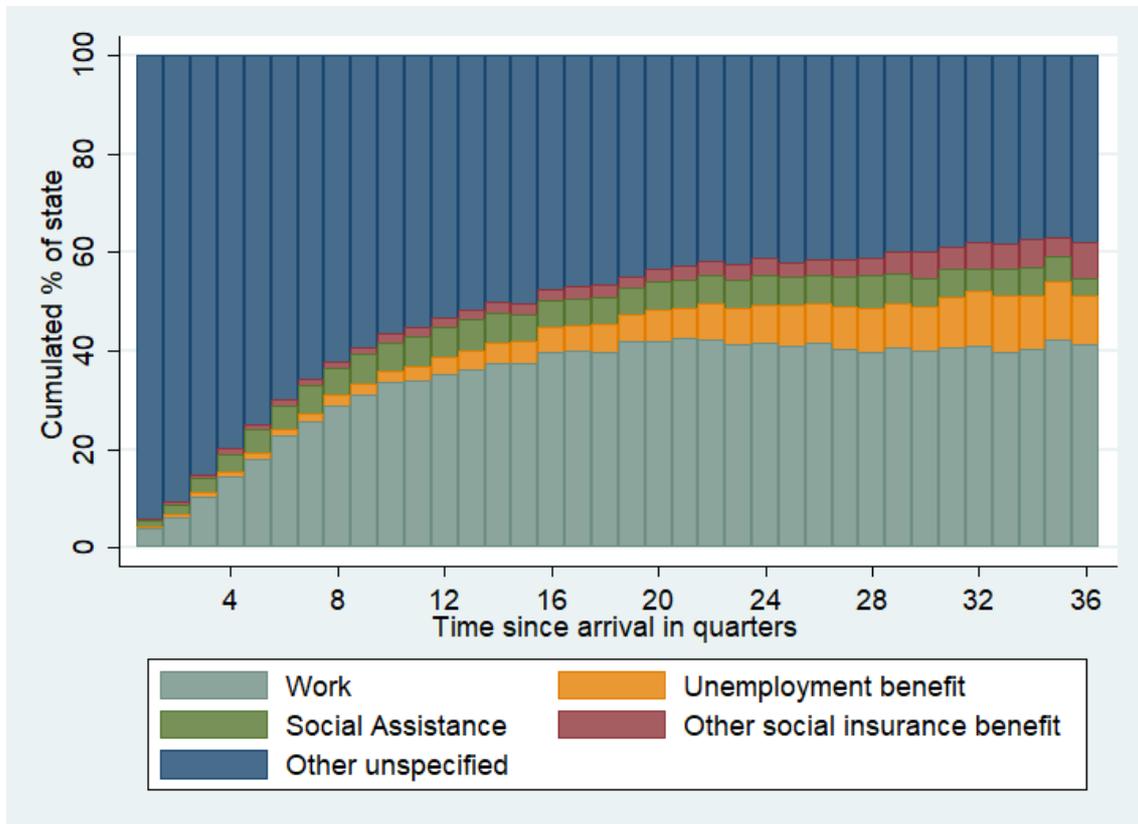
**Figure 2. Quarterly distribution of socio-economic positions by time since arrival, refugees**



*Source: Labour Force Survey and Data Warehouse Labour Market and Social Protection*

Like refugees, very few family migrants are employed in the formal labor market after entry (see Figure 3). However, family migrants are less dependent on social assistance transfers compared to their refugee counterparts. In the former group, the share of social assistance beneficiaries gradually increases to around 6% after the second year since arrival, and remains quite stable thereafter. Employment levels also seem to increase more rapidly, although they converge towards a relatively low level of 42% after nine years. Like refugees, family migrants have a very low unemployment rate in the first years of residence, which is what we would expect considering that both groups lack the stable job history that is required to be entitled to unemployment benefits. However, for family migrants – like refugees- the unemployment rate increases steadily, peaking at a level of 10% after nine years. What clearly sets family migrants apart is their large share of individuals in the status ‘other unspecified’, representing persons who are unknown to Belgian social security. 37% of family migrants remain in this state after nine years of residence.

**Figure 3. Quarterly distribution of socio-economic positions by time since arrival, family migrants**

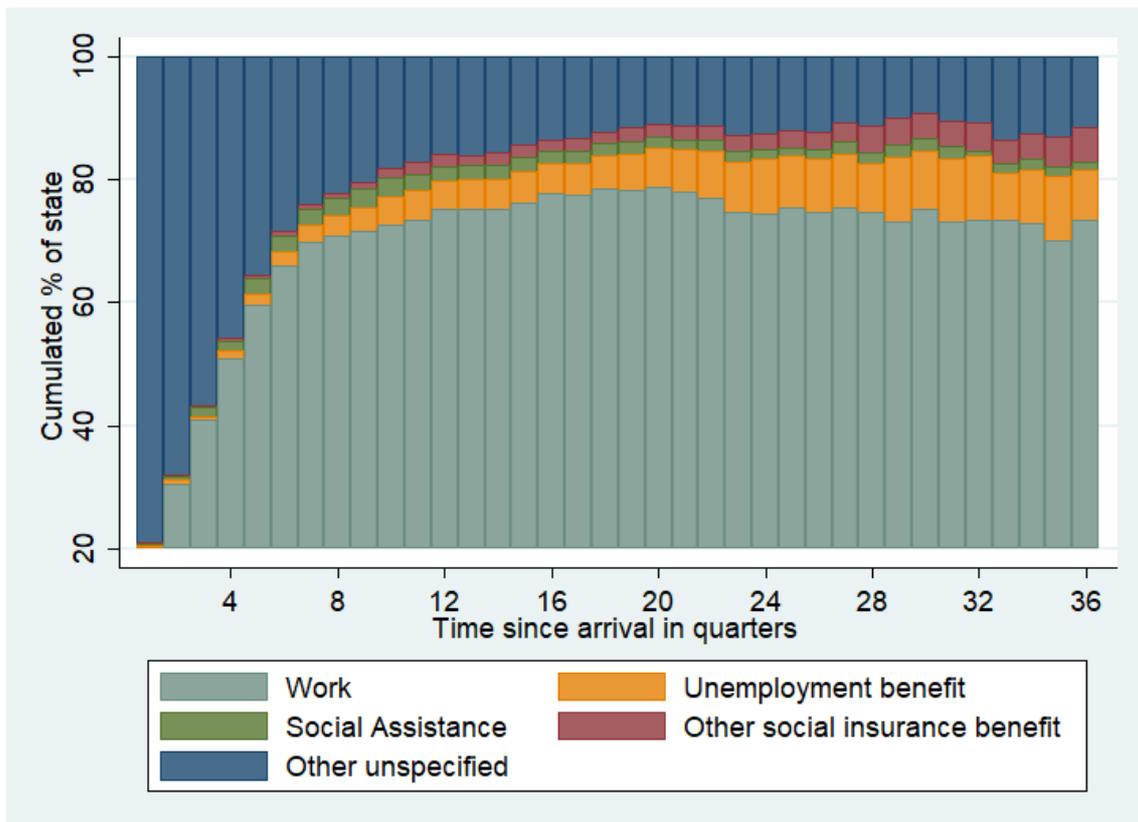


*Source: Labour Force Survey and Data Warehouse Labour Market and Social Protection*

As expected, labor migrants clearly have the fastest labor market attachment, with an employment rate of 52% at the end of the first year, 72% at the end of the second year and 75% from the third year onwards (Figure 4). During the first years after arrival, labor migrants also have the highest unemployment attachment of the three comparison groups, mirroring their faster pace of employment entry. This picture changes somewhat thereafter, as their unemployment rate of 9% stands slightly below the unemployment level of family migrants (10%) and way below the level of refugees (18%) after nine years. Lastly, social assistance take-up is only marginal among labor

migrants (below 3%), compared to the dependency levels of family migrants and - in particular - refugees.

**Figure 4. Quarterly distribution of socio-economic positions by time since arrival, labor migrants**



*Source: Labour Force Survey and Data Warehouse Labour Market and Social Protection*

The results show that compared to other migrant groups, it takes refugees significantly longer to get a foothold in the Belgian labor market. Because of their weak ties to the labor market in the first years of residence, refugees are particularly vulnerable to recourse to social assistance. Once they get onto the labor market and build up social security entitlements, they also seem to run a greater risk of transitioning into the unemployment benefit scheme. The questions following up on this are whether

these differences persist and whether they are statistically significant upon controlling for important covariates. To answer them, in the next subsection, we use discrete-event history modelling to study the effect of migration motive on the duration until first employment entry. Subsequently, we analyse the risk of exiting the first employment to unemployment, social assistance and a heterogeneous ‘other’ state in a competing risks framework.

### *5.3. The duration until first employment entry*

In Table 2, we show the results of two models that we estimated. Model A displays the results of the logit model of the hazard of the first employment entry, including all covariates. From Model A it is obvious that labor migrants enter employment at a quicker pace than family migrants (the reference category). Refugees, on the contrary, display similar trends to family migrants upon labor market entry. However, as outlined above, differences might change over time. To test our expectations on the time dependency of relative risk of the three comparison groups, two time-varying covariates are included in Model B: elapsed time for labor migrants (Labor\*time linear) and elapsed time for refugees (Refugee\*time linear). Controlling for these interaction variables, the main effects observed for labor or refugee groups can now be interpreted as the group (dis)advantage (relative to family migrants) immediately after arrival. The odds ratio of the respective interaction variable then indicates whether the (dis)advantage remains constant ( $\approx 1$ ), decreases ( $< 1$ ), or increases ( $> 1$ ) over time. The odds ratio of the main refugee dummy stands at 0.38. This effect now refers to the net disadvantage of refugees relative to family migrants concerning the ‘risk’ of entering employment immediately after arrival. The odds ratio of the interaction effect (1.09) indicates that the initial disadvantage of refugees declines as the time spent in the host country increases. Labor migrants on the other hand experience a large net

advantage (3.59) over family migrants, which decreases with time spent in the host country (as shown by the odds ratio of the interaction term: 0.96).

Above and beyond the effects of migration motive, female migrants enter employment less smoothly than male migrants do. The impact of age at migration is curvilinear, with the ‘risk’ of entering employment increasing in the first years but flattening out later on. The level of education is clearly important for labor market entry, though surprisingly, highly educated migrants do not hold any advantage over medium educated migrants in entering the labor market. We also find that migrants residing in Wallonia have more difficulties in entering the labor market than migrants residing in Flanders and Brussels. Region of origin is clearly an important factor. In comparison to migrants from EU Member States, Asian, European non-EU and Turkish and North-African migrants are significantly slower in entering employment, in that order. Migrants from sub-Saharan Africa and America on the other hand, do not differ significantly from EU migrants when it comes to the speed of labor market entry. Finally, we find that relative to the arrival cohort of 2003, the odds of entering the first employment are significantly higher among more recent arrival cohorts. It is not so clear what exactly is driving these changes as many factors changed during this period.

**Table 2. Exponentiated coefficients of the logit model of the hazard of the first employment entry**

	(A)	(B)
Constant	0.01***	0.01***
<b>Specification of hazard</b>		
Linear specification of time	0.93***	0.92***
Natural logarithm of time	1.48***	1.65***
<b>Comparison group (family is ref. category)</b>		
Labor	2.73***	3.59***
Refugee	0.89	0.38***

Labor*time linear		0.96***
Refugee*time linear		1.09***
<b>Sex (female is ref. category)</b>		
Male	1.87***	1.89***
<b>Age at arrival</b>		
Age	1.12***	1.11***
Age squared	1.00***	1.00***
<b>Highest level of education (low is ref. category)</b>		
Medium	1.21***	1.22***
High	1.17**	1.18**
<b>Region of residence (Brussels is ref. category)</b>		
Flanders	1.04	1.06
Wallonia	0.88*	0.87**
<b>Region of origin (EU is ref. category)</b>		
Europe non-EU	0.68***	0.65***
Turkey & North-Africa	0.73***	0.74***
sub-Sahara Africa	0.89	0.90
Asia	0.65***	0.66***
America	1.04	1.04
<b>Year of arrival (2003 is ref. category)</b>		
2004	1.10	1.12
2005	1.24*	1.24**
2006	1.39***	1.39***
2007	1.38***	1.37***
2008	1.41***	1.39***
2009	1.66***	1.64***
<b>Year of LFS (2010 is ref. category)</b>		
2011	0.92	0.93
2012	0.93	0.93

*Source: Labour Force Survey and Data Warehouse Labour Market and Social*

#### *Protection*

*Notes: Results are weighted using the available weighting variable in the LFS, which adds weights gender, age and region of residence. \*\*  $p < 0.001$ , \*  $p < 0.01$ , \*  $p < 0.05$*

#### **5.4.Exit out of the first employment – where to?**

So far, our analyses have shown that refugees experience a net disadvantage in entering employment over family and labor migrants right after arrival and that this disadvantage lessens over time. In this section, we look at the duration in the first employment to see

when refugees and other migrants exit, thereby distinguishing between different types of exit. We consider three types of exit, namely unemployment, social assistance and a heterogeneous ‘other’ state (which includes both transitions to ‘other social insurance’ and ‘other unspecified’).

The results for the multivariate hazard models of exit type are included in Table 3. Model A indicates that refugees run a higher risk of exiting their first employment compared to family migrants. This gap primarily reflects higher probabilities to exit to unemployment or social assistance (which in the case of refugees often means re-entering social assistance). The probability to exit employment to ‘other’ is higher for family migrants than for refugees. Labor migrants on the other hand have lower exit probabilities than family migrant which is mainly caused by their lower likelihood to transition to the ‘other’ state.

The results additionally show that male migrants have a lower risk of exiting employment to the ‘other’ state compared to their female counterparts. Age at migration is also negatively correlated to exit to the ‘other’ state, though at a decreasing rate. The direction of the education effect is as expected: the higher the level of education the lower the ‘risk’ of exiting the first employment. High educated individuals are less likely to experience all types of exit, compared to low educated individuals. We also find that migrants residing in Flanders are more likely to exit to the ‘other’ state while they are less likely to exit to social assistance, compared to migrants living in Brussels. The pattern of employment exit differs largely between origin groups. Origin groups that are particularly vulnerable with regard to employment exit are Turks and North-Africans, sub-Saharan Africans and Asians. For the two latter groups, this is primarily reflected in their higher probability to take up social assistance.

**Table 3. Exponentiated coefficients of the logit model of the hazard of the first employment exit – competing risks**

	(A) ALL	(B) UNEMP	(C) SA	(D) OTHER
Constant	0.95	0.04***	0.04*	0.96
<b>Specification of hazard</b>				
Linear specification of time	1.02	0.93**	0.96	1.04**
Natural logarithm of time	0.49***	1.52*	0.34***	0.41***
<b>Comparison group (family is ref. category)</b>				
Labor	0.66***	0.76	1.14	0.61***
Refugee	1.38**	2.44***	6.40***	0.48***
<b>Sex (female is ref. category)</b>				
Male	0.85**	0.87	1.06	0.83**
<b>Age at arrival</b>				
Age	0.92***	0.92	0.94	0.92***
Age squared	1.00**	1.00	1.00	1.00**
<b>Highest level of education (low is ref. category)</b>				
Medium	0.78***	0.84	0.74	0.76***
High	0.72***	0.67**	0.36***	0.78**
<b>Region of residence (Brussels is ref. category)</b>				
Flanders	1.20**	1.10	0.66*	1.30***
Wallonia	1.06	1.13	1.17	1.02
<b>Region of origin (EU is ref. category)</b>				
Europe non-EU	1.20	1.68*	2.28	1.10
Turkey & North-Africa	1.66***	3.52***	3.29***	1.26*
sub-Saharan Africa	1.92***	2.68***	6.48***	1.53***
Asia	1.43***	1.31	4.97***	1.31*
America		0.78	2.06	0.87
<b>Year of arrival (2003 is ref. category)</b>				
2004	0.74**	0.75	0.82	0.70**
2005	0.86	0.89	1.01	0.82
2006	0.76**	0.78	0.54	0.78*
2007	0.70***	0.61***	0.53*	0.75*
2008	0.88	0.70	0.34**	1.02
2009	0.93	0.73	0.34**	1.07
<b>Year of LFS (2010 is ref. category)</b>				
2011	0.96	1.11	1.13	0.90
2012	1.05	1.19	1.14	1.01

Source: Labour Force Survey and Data Warehouse Labour Market and Social

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*Notes: Results are weighted using the available weighting variable in the LFS, which adds weights gender, age and region of residence. \*\*  $p < 0.001$ , \*  $p < 0.01$ , \*  $p < 0.05$*

## **6. Discussion and conclusion**

The socio-economic integration of refugees has become a key issue in the wake of the recent influx of asylum seekers to Europe. In this paper, we have examined the labor market integration of refugees who arrived in Belgium between 2003 and 2009 by looking at how their socio-economic careers unfolded after arrival. Based on a linkage of the Belgian Labour Force Survey with longitudinal administrative data from the Data Warehouse Labour Market and Social Protection, we estimated discrete-time event history models to compare both entry into and exit out of the first employment between refugees and family and labor migrants of the same arrival cohort.

The analysis shows that refugees take significantly longer to enter their first employment as compared to other migrant groups. Their weak ties to the labor market make them particularly prone to recourse to social assistance, especially in the first years after arrival. That allows them to settle, to become accustomed, to develop ties and to look for work. Over time, refugees do catch up to some extent and the employment gap with labor migrants and family migrants decreases. However, once refugees have built up a limited employment history, they also run a greater risk of exiting their first employment (back) into social assistance and into unemployment. These results hold after controlling for differences in gender, human capital, region of origin and year of arrival.

It is not clear why this happens. One possibility is that they get discouraged in the types of jobs that they are able to acquire. These jobs are often insecure and

unattractive. The better educated tend to work in jobs far below their qualifications, usually because those qualifications are not recognized (Lens et al., 2018).

The extent to which the findings outlined in this paper can be applied to more recent arrivals is uncertain – conditions have changed in crucial aspects and the composition of more recent inflows is different from the people under focus in the present analysis.

This is especially important since the objective of providing fast labor market access to refugees remains high on the agenda. However, our results provide clear arguments in favour of policies that support sustainable labor market integration instead of just promoting quick access to the labor market. Additional targeted educational and labor market measures are probably needed to promote durable integration of refugees into the Belgian labor market—and thereby also into Belgian society.

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